



# *GNSS Antennas* **TSA500**

External Antenna with Six-constellation  
and Eleven-frequency

# TSA500 Survey GNSS Antenna

TSA500 is an external measurement antenna offers superior satellite signal tracking, including GPS, GLONASS, GALILEO, BDS, QZSS and SBAS signal reception. It meets the current requirements of multi-system compatibility for measurement devices. It finds extensive applications in geodetic surveying, marine measurement, channel surveying, land surveying, seismic monitoring, bridge deformation monitoring, landslide monitoring, container operations at ports, and other fields within the surveying industry.

## SPECIFICATION

### SIGNAL RECEIVED

GPS	L1/L2
GLONASS	L1/L2
GALILEO	E1
BDS	B1/B2/B3
QZSS	L1/L2
SBAS	L1

### ANTENNA FEATURE

Nominal Impedance	50 $\Omega$
Polarization	RHCP
Axial Ratio	$\leq 3$ dB
Gain at Zenith (90°)	1205-1278MHz 5.5dBi(maximum) 1559-1615MHz 5.5dBi(maximum)
LNA Gain	40dB(typical)
Noise Figure	$\leq 2$ dB

Output/Input VSWR  $\leq 2.0$

Operation Voltage +3.3V to +12VDC

Operation Current 45mA(maximum)

Group Delay Ripple  $\leq 5$ ns

### MECHANICAL

Dimensions	$\phi 152$ mm*62.2mm
Connector	TNC female
Weight	$\leq 500$ g
Mounting	BSW5/8"-11 screw, 12-14mm

### ENVIRONMENTAL

Temperature	Operating -40 $^{\circ}$ C to +85 $^{\circ}$ C Storage -55 $^{\circ}$ C to +85 $^{\circ}$ C
Humidity	95% non-condensing
Protection	IP67
Regulatory Compliance	CE, FCC, RoHS

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Manufacturers may update parameters at any time, please refer to the latest product information.



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